

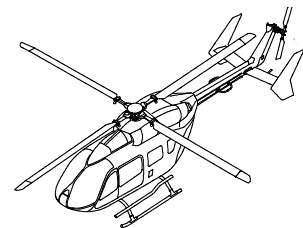
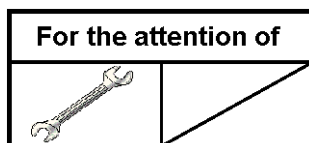


Valid for Version(s): C-2, C-2e.

# ALERT SERVICE BULLETIN

**SUBJECT:** ELECTRICAL POWER - Generator Control Unit

Conversion of model 51530-021 EI MOD "C" to model 51530-022



Revision No.	Date of issue
Revision 0	2017-07-11

**Summary:**

Due to Airbus Helicopters internal guidelines, this in combination with EASA rules, the re-identification of the part number of the Generator Control Unit (GCU) becomes necessary.

**Compliance:**

Airbus Helicopters Deutschland (AHD) considers that compliance with the instructions contained in this Alert Service Bulletin (ASB) is mandatory.

## 1 PLANNING INFORMATION

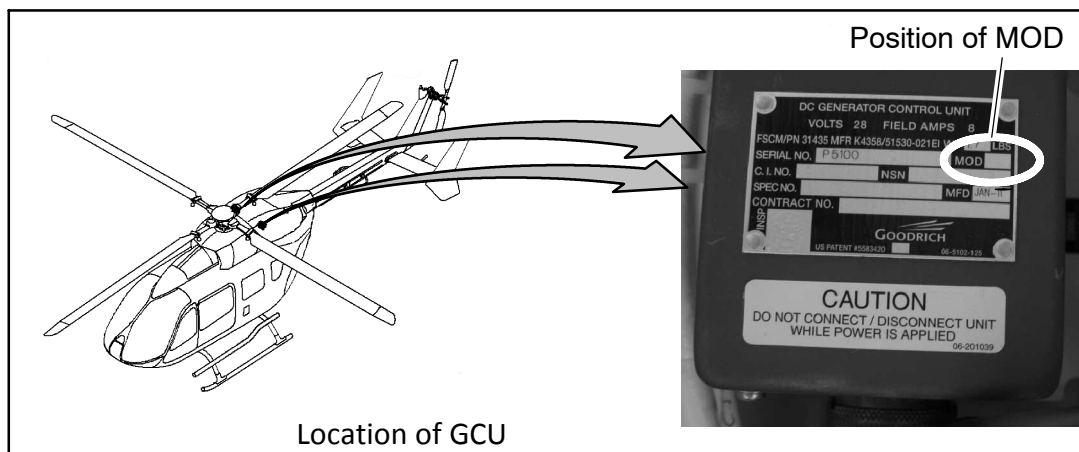
### 1.A EFFECTIVITY

#### 1.A.1 Helicopters/installed equipment and parts

- a) MBB-BK117 C-2, C-2e, all S/N.
- b) Generator Control Unit (GCU) Model 51530-021EI, Mod "C".

#### 1.A.2 Non-installed equipment and parts

Generator Control Unit (GCU) Model 51530-021EI, Mod "C".



### 1.B ASSOCIATED REQUIREMENTS

Not applicable.

### 1.C REASON

Due to Airbus Helicopters internal guidelines, this in combination with EASA rules, the re-identification of the part number of the Generator Control Unit (GCU) becomes necessary. It is prescribed by means of this ASB. The identification plate of the GCU with the part number 51530-021EI, Mod "C" must be replaced with an identification plate with the part number 51530-022. The GCU model 51530-022 is technically identical to GCU Model 51530-021EI, Mod "C".

### 1.D DESCRIPTION

See Section 1.D of Service Bulletin 51530-021EI-24-05 of the SAFRAN POWER company attached to this ASB.

### 1.E COMPLIANCE

#### 1.E.1 Compliance at H/C manufacturer level

Helicopters/installed equipment and parts:

The instructions given in this ASB must be accomplished before the delivery of the helicopter at the latest.

Non-installed equipment and parts:

The instructions given in this ASB must be accomplished before the delivery of the Generator Control Unit (GCU).

**1.E.2 Compliance in service**

Helicopters/installed equipment and parts:

The instructions given in this ASB must be accomplished within the next 12 months after reception of this ASB.

Non-installed equipment and parts:

The instructions given in this ASB must be accomplished within the next 12 months after reception of this ASB.

**1.F APPROVAL**

Approval of modification(s):

The information or instructions contained in this document refer to change no. E-2402. The technical content of this document is approved by EASA.

**1.G MANPOWER**

See Section 1.G of Service Bulletin 51530-021EI-24-05 of the SAFRAN POWER company attached to this ASB.

**1.H WEIGHT AND BALANCE**

Not applicable.

**1.I POWER CONSUMPTION**

Not applicable.

**1.J SOFTWARE UPGRADES/UPDATES**

Not applicable.

**1.K REFERENCES**

Not applicable.

**1.L OTHER AFFECTED PUBLICATIONS**Publications already updated:

Not applicable.

Publications to be updated:

The changes to IPC MBB-BK117 C-2 which are required as a result of this ASB will be incorporated with one of the next revisions.

**1.M INTERCHANGEABILITY OR MIXABILITY OF PARTS**Interchangeability:

Not applicable.

Mixability:

Not applicable.

**2 MATERIAL INFORMATION****2.A MATERIAL: PRICE - AVAILABILITY - PROCUREMENT**

Information on price and availability of required material kit SB-117C2-24A-014-2C will be provided by AHD, Dept. Spares Order Administration on request.

**2.B LOGISTIC INFORMATION**

Not applicable.

**2.C MATERIAL REQUIRED PER HELICOPTER/COMPONENT**

Material kit to be ordered for one helicopter:

Material kit SB-117C2-24A-014-2C.

No.	Keyword	Qty	New P/N	Old P/N	Rem.
1	Plate, Identification	2	06-5118-01	-	-

**2.D MATERIAL TO BE RETURNED**

Not applicable.

### **3 ACCOMPLISHMENT INSTRUCTIONS**

#### **3.A GENERAL**

Not applicable.

##### **3.A.1 Procedure**

Remove the interior panels of the aft area i.a.w. AMM 25-20-00, 4-1.

**NOTE** The procedure is identical for the RH and LH Generator Control Unit (GCU).  
See Section 3 of Service Bulletin 51530-021EI-24-05 of the SAFRAN POWER company attached to this ASB.

Install the interior panels of the aft area i.a.w. AMM 25-20-00, 4-2.

##### **3.A.2 Tests**

See Section 3.E. of Service Bulletin 51530-021EI-24-05 of the SAFRAN POWER company attached to this ASB.

#### **3.B COMPLIANCE CONFIRMATION**

##### Compliance with this document:

Confirm accomplishment of this ASB by an entry in the historical record of the helicopter.

Enter the new part numbers of the Generator Control Unit (GCU) in the inventory list.

##### Identification of modifications on equipment or parts:

See Section 3.F. of Service Bulletin 51530-021EI-24-05 of the SAFRAN POWER company attached to this ASB.

#### **3.C OPERATING AND MAINTENANCE INSTRUCTIONS**

##### Operating instructions:

Not applicable.

##### Maintenance instructions:

Not applicable.

### **4 APPENDIX**

Service Bulletin 51530-021EI-24-05 of the SAFRAN POWER company.



## **SERVICE BULLETIN**

Safran Power USA  
8380 Darrow Road  
Twinsburg, Ohio, USA  
(1) 330 487 2000

## **SERVICE BULLETIN STANDARD**

### **ELECTRICAL POWER - GENERATOR CONTROL UNIT - CONVERSION OF MODEL 51530-021EI MOD "C" TO MODEL 51530-022**

Transmittal Sheet

TO

SERVICE BULLETIN  
SB 51530-021EI-24-05, Revision 1

1. Revision Procedure

- A. This page transmits Revision 1 of Service Bulletin 51530-021EI-24-05 in its entirety. Discard all previously released copies of Service Bulletin 51530-021EI-24-05.
- B. File this letter of transmittal to record this new issue was completed under Federal Aviation Regulations and EASA regulations.

2. Revision Highlights

- A. Accomplishment Instructions:
  - (1) Updated the procedure in "Re-identification" Section.
  - (2) Modified Figure 1 (Replacement Identification Plate).
  - (3) Modified Figure 2 (Alignment of new ID. Plate).

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## **SERVICE BULLETIN**

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## SERVICE BULLETIN

### 1. Planning Information

#### A. Effectivity

This service bulletin is applicable to the Safran Power DC Generator Control Unit (GCU) Model 51530-021EI, Mod "C".

NOTE: The modification letters can show a strikethrough (Mod "AC" or "BC").

#### B. Concurrent Requirements

The model 51530-021EI must be at Mod "C". Return the GCU to a Safran Power authorized repair center for modification, if not at Mod "C". Refer to SB 51530-021EI-24-03.

#### C. Reason

This service bulletin introduces a new Identification Plate, P/N 06-5118-01. Airbus helicopter has required a new part number for the GCU to simplify tracking.

#### D. Description

This service bulletin provides instructions for converting DC GCU, Model 51530-021EI, Mod "C" to DC GCU, Model 51530-022. The Model 51530-022 will be released identical to the existing Model 51530-021EI Mod "C", with the exception of nameplate.

NOTE: The suggested changes to upgrade to Model 51530-022 are required to comply with the GCU model number documentation requirements of Airbus Helicopter.

#### E. Compliance

##### REQUIRED

Safran Power and Airbus Helicopter requires that these instructions be accomplished at the earliest convenience on the Model 51530-021EI.

#### F. Approval

This Service Bulletin has the approval of Safran Power USA and Airbus Helicopter. The instructions specified in this Service Bulletin are in compliance with the approved design data for the Model 51530-022, DC GCU.

#### G. Manpower

0.5 man-hour required to complete this service bulletin.

#### H. Weight and Balance

Effect on weight: No effect

Effect on overhung moment: No effect

#### I. Electrical Load Data

Not Changed.

#### J. References

Refer to the 51530-021EI (DC GCU), Component Maintenance Manual (CMM) with Illustrated Parts List (IPL) (24-31-30).

Refer to SB 51530-021EI-24-03.

Initial Issue : Dec 21/15

Revision Date : Mar 14/16

**51530-021EI-24-05**

## SERVICE BULLETIN

### K. Other Publications Affected

The 51530-021EI (DC GCU), Component Maintenance Manual (CMM) with Illustrated Parts List (IPL) (24-31-30) will be revised to include the new model in this service bulletin.

## 2. Material Information

### A. Material - Price and Availability

(1) The parts necessary to complete this Service Bulletin will be provided Free-of-Charge (FoC).

### B. Industry Support Data

(1) If you need to contact Safran Power for questions with this SB, contact:

Safran Power USA  
8380 Darrow Road  
Twinsburg, Ohio 44087-2329  
USA  
Telephone: (1) 330 487 2000  
Facsimile: (1) 330 487 1902  
Email: lps.twn.techservice@labinal-power.com

Safran Power UK  
Pitstone Green Business Park  
Westfield Road  
Pitstone  
Buckinghamshire LU7 9GT  
United Kingdom  
Telephone: +44 (0)1296 663000  
Facsimile: +44 (0)1296 663326  
Email: pitstone.repairs@labinal-power.com

### C. Parts and Materials Necessary for each Component

#### (1) Parts Requirements

Parts required to accomplish the model conversion and to re-identify the DC GCU 51530-021EI Mod "C" to 51530-022 are as follows:

New P/N	Nomenclature	Old P/N	Qty	Instructions/ Disposition
06-5118-01	Plate, Identification (Metal Foil)	----	1	Transfer data/ Install

#### (2) Material Requirements

Materials required to accomplish the model conversion and to re-identify the DC GCU 51530-021EI Mod "C" to 51530-022 are as follows:

Material	Description/Specification	Qty	Source (CAGE Code)
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Material	Description/Specification	Qty	Source (CAGE Code)
Coating, Conformal	P/N 1-2577, Silicon Resin MIL-I-46058 Type SR	AR	Dow Corning Corporation 3835 Copley Rd. Copley, OH 44321 www.dowcorning.com (V71984)
	P/N 02-7001-10	AR	Safran Power
Brush	Non-metallic, soft bristle	1	Commercially Available
Cleaning pads/ Wiping Cloths	Lint free, soft fabric	AR	Commercially Available
Isopropyl Alcohol	TT-I-735, Grade A Flash Point: 53° F (12° C). FLAMMABLE Refer to the Material Safety Data (MSD) Sheet for the material for additional safety information	AR	Commercially Available

### (3) Tool Requirements

Tools required to accomplish the model conversion and to re-identify the DC GCU 51530-021EI Mod "C" to 51530-022 are as follows:

Tools	Description/Specification	Qty	Source (CAGE Code)
Heat Gun	Raychem model 500B or equivalent	1	Commercially Available
Etching Tool	Vibro-etch tool	1	Commercially Available

### 3. Accomplishment Instructions

#### A. General

This service bulletin provides instructions for converting DC GCU, Model 51530-021EI Mod "C" to DC GCU, Model 51530-022. The Model 51530-022 will be released identical to the existing Model 51530-021EI, Mod "C", with the exception of nameplate.

#### B. Preparation

The GCU modification is to be performed in a clean, dry area free of oil, dirt, moisture, and other contamination. The GCU must be kept clean to ensure the operating effectiveness of the unit.

#### C. Cleaning

**WARNING:** ISOPROPYL ALCOHOL IS FLAMMABLE. DO NOT USE NEAR OPEN FLAMES, WELDING AREAS, OR ON HOT SURFACES. AVOID PROLONGED EXPOSURE AND USE ONLY IN A WELL-VENTILATED AREA. INHALATION OF VAPORS CAN CAUSE DROWSINESS, DIZZINESS, AND HEADACHE. CONTACT WITH SKIN CAN CAUSE IRRITATION.

Clean the surface of existing nameplate and its adjacent areas with isopropyl alcohol and lint free cloth.

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NOTE: Position the GCU to ensure alcohol does not drip into the interior of the GCU.

D. Check

Check if the existing nameplate can be read so data can be transferred to the new plate.

E. Testing

As the GCU covers are not removed to accomplish these instructions, it is not necessary to perform an acceptance test on the units after the rework is completed.

F. Re-identification

(1) Rework Instructions to install the new nameplate.

- (a) Record the serial number and manufacturing date from the existing nameplate.
- (b) Put the replacement identification plate (P/N 06-5118-01) on a wood backing surface and vibro-etch the recorded information from the old identification plate to the new replacement identification plate (P/N 06-5118-01) as shown in (Ref. Fig. 1).

NOTE: Identify this unit as a 51530-022.

- (c) After the serial number has been transferred, vibro-etch the applicable suffix as follows:
  - 1 If the model had been a 51530-021EI with a suffix "/CA" after the serial number, then suffix "/2CAA" must be added to the serial number on the 51530-022 nameplate.
  - 2 If the model had been a 51530-021EI with no suffix after the serial number, then the suffix "/CA" must be added to the serial number on the 51530-022 nameplate.
- (d) Do not transfer "MOD" information or inspection (INSP) information from the old identification plate.

WARNING: CONFORMAL COATING IS FLAMMABLE. DO NOT USE NEAR OPEN FLAMES, WELDING AREAS, OR ON HOT SURFACES. AVOID PROLONGED EXPOSURE AND USE ONLY IN A WELL-VENTILATED AREA. INHALATION OF VAPORS CAN CAUSE DROWSINESS, DIZZINESS, AND HEADACHE. CONTACT WITH SKIN CAN CAUSE IRRITATION.

- (e) Apply a new layer of conformal coating over the existing conformal coating on the old identification plate.
- (f) Align the new identification plate in the same position and orientation as the existing nameplate as shown (Ref. Fig. 2).

NOTE: Make sure that the information on the new replacement identification plate read in the same direction as the old identification plate (Ref. Fig. 2).

- (g) Push the new identification plate into the new conformal coat layer.
- (h) Pre-cure the applied conformal coat using heat gun positioned 12 inches (304.8 mm) from the new identification plate.
- (i) Apply heat for 60 seconds.
- (j) Overcoat the new identification plate with conformal coating.


NOTE: Make sure that the coating extends beyond the edges of the nameplate to the cover.

- (k) Apply heat for 60 seconds.
- (l) Install the GCU to the aircraft.

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NOTE: The conformal coating will take 12 to 24 hours to fully cure.

VIBRO-ETCH "1/2CAA" OR "1/CA"  
AFTER THE SERIAL NUMBER  
AS REQUIRED

DC GENERATOR CONTROL UNIT			
VOLTS	28	FIELD AMPS	8
FSCM/PN 3CPE0 MFR K4358/	51530-022	WT	1.7 LBS
SERIAL NO.			MOD
C.I. NO.		NSN	
SPEC NO.			MFD
CONTRACT NO.			
INSP			REPLACEMENT 06-5118- 01

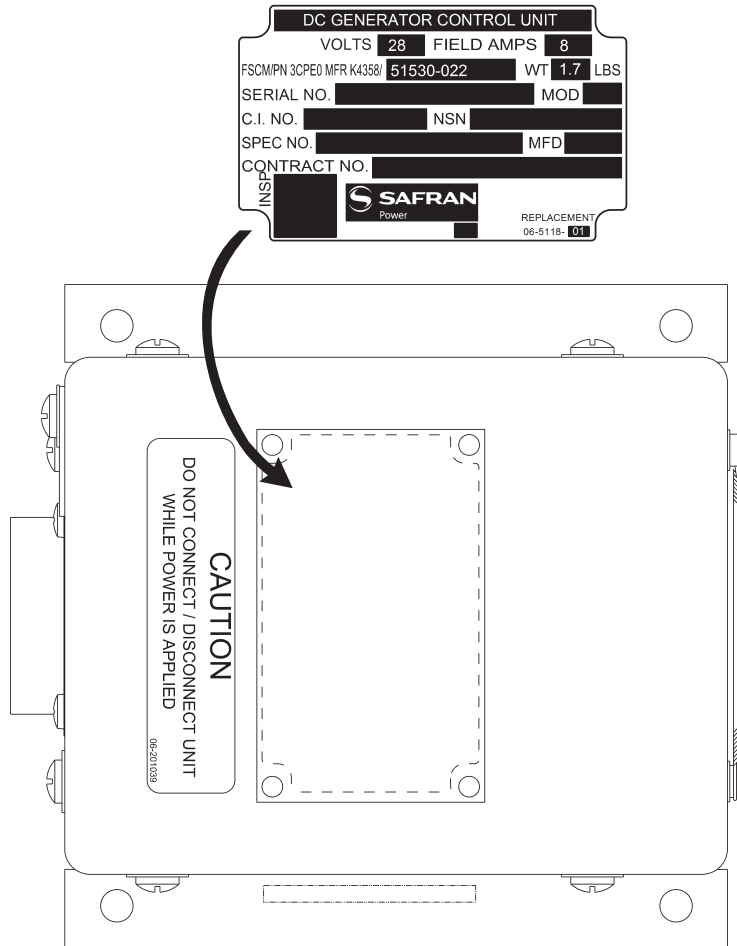
NOTE: THE SERIAL NO. AND MANUFACTURE DATE (MFD) MUST BE TRANSFERRED  
FROM OLD ID. PLATE.

NOTE: DO NOT TRANSFER "MOD" STATUS AND "INSP" INFORMATION FROM OLD ID. PLATE.

Replacement Identification Plate

Figure 1

## SERVICE BULLETIN



NOTE: ALIGN THIS NEW ID. PLATE TO READ THE INFORMATION ON IT IN THE SAME DIRECTION AS THE EXISTING NAMEPLATE.

Alignment of New ID. Plate  
Figure 2